Product Datasheet

TRA-1-81 Antibody (TRA-1-81) - BSA Free NB100-1833

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Publications: 7

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NB100-1833

Updated 2/21/2025 v.20.1

Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications Submit a review at www.novusbio.com/reviews/destination/NB100-1833



NB100-1833

TRA-1-81 Antibody (TRA-1-81) - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	TRA-1-81
Preservative	0.05% Sodium Azide
Isotype	IgM
Purity	IgM purified
Buffer	Tris-Glycine and 0.15M NaCl
Product Description	
Host	Mouse
Gene ID	5420
Species	Human, Mouse (Negative)
Reactivity Notes	This antibody recognizes the TRA-1-81 antigen that is expressed upon the surface of human teratocarcinoma stem cells (EC), human embryonic germ cells (EG) and human embryonic stem cells (ES). No immunoreactivity is seen with murine EC, EG or ES cells. This antibody recognizes antigens that are associated with a pericellular matrix proteoglycan.
Marker	Embryonic Stem Cell Marker, Tumor Vessel Marker
Immunogen	Human embryonal carcinoma cell line 2102Ep.
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry- Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500, Flow Cytometry 1:10-1:1000. Use reported in scientific literature, Immunohistochemistry 1:50-1:200, Immunocytochemistry/ Immunofluorescence 1:50-1:200, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:50-1:200, Immunohistochemistry-Frozen 1:50-1:200



207 K

117K-

95 K -

THA-1-81

Δ

207 K

117K-

95 K -

8

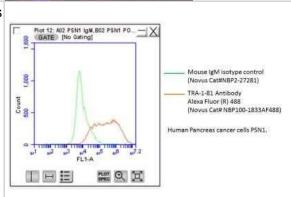
RA-1-60

Images

Western Blot: TRA-1-81 Antibody (TRA-1-81) [NB100-1833] - Analysis of NB100-1833 expression in NTERA-2 cl.D1 whole cell lysate.

Immunocytochemistry/Immunofluorescence: TRA-1-81 Antibody (TRA-1-81) [NB100-1833] - TRA-1-81 was detected in immersion fixed BG01V human embryonic stem cells using Mouse Anti-Human TRA-1-81 Monoclonal Antibody (Catalog # NB100-1833) at 10 ug/mL for 3 hours at room temperature. Cells were stained using an Anti-Mouse IgM Secondary Antibody (red) and counterstained with DAPI (blue). Specific staining was localized to cell membrane.

Flow Cytometry: TRA-1-81 Antibody (TRA-1-81) [NB100-1833] - Analysis using the Alexa Fluor (R) 488 conjugate of NB100-1833. Staining of human cancer line PSN1. Image from verified customer review.







Publications

Rossbach B, Hildebrand L, El-Ahmad L. Generation of a human induced pluripotent stem cell line from urinary cells of a healthy donor using an integration free vector. Stem Cell Research. 2016-03-01 [PMID: 28677531] (ICC/IF, Human)

Details:

This citation used the DyLight 650 form of this antibody.

Rossbach B, Hildebrand L, El-Ahmad L. Generation of a human induced pluripotent stem cell line from urinary cells of a healthy donor using an integration free vector Stem Cell Research 2016-01-01 [PMID: 27638042] (ICC/IF, Human)

Details:

This reference used the DyLight 650 version of NB100-1833.

Rossbach B, Hildebrand L, El-Ahmad L. Generation of a human induced pluripotent stem cell line from urinary cells of a healthy donor using an integration free vector. Stem Cell Res 2016-06-28 [PMID: 27345993] (ICC/IF, Human)

Hildebrand L, Seemann P, Kurtz A et al. Selective cell targeting and lineage tracing of human induced pluripotent stem cells using recombinant avian retroviruses Cell. Mol Life Sci 2015-06-25 [PMID: 26109426] (ICC/IF, Human)

Details:

This publication used the DL650 conjugated form of this antibody (NB100-1833C)

Mizrak SC, Chikhovskaya JV, Sadri-Ardekani H et al. Embryonic stem cell-like cells derived from adult human testis. Hum Reprod :dep354. 2009-01-01 [PMID: 19815622] (ICC/IF, Human)

Henderson, JK et al. Preimplantation human embryos and embryonic stem cells show comparable expression of stage-specific embryonic antigens. Stem Cells;20(4):329-37. 2002-01-01 [PMID: 12110702] (FLOW, ICC/IF, Human)

Badcock, G et al. The human embryonal carcinoma marker antigen TRA-1-60 is a sialylated keratan sulfate proteoglycan. Cancer Res;59(18):4715-9. 1999-09-15 [PMID: 10493530] (WB, Human)



Procedures

Serum protocol for TRA-1-81 Antibody (NB100-1833)

TRA-1-81 Antibody (TRA-1-81): Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.

2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.

3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.

4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.

5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.

6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.

7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.

8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.

9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112 USA Phone: 303.730.1950 Toll Free: 1.888.506.6887 Fax: 303.730.1966 nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave Toronto, ON M8Z 4E6 Canada Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402 canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449 Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com Technical Support: nb-technical@biotechne.com Orders: nb-customerservice@bio-techne.com General: novus@novusbio.com

Products Related to NB100-1833

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP2-62224	Mouse IgM Isotype Control (PFR-03)
210-TA-005	TNF-alpha [Unconjugated]

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB100-1833

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications

www.novusbio.com

